

REDISCOVERY OF POURTALES' HALIOTIS.

By JOHN B. HENDERSON,
Of the Smithsonian Institution.

During 1869 a series of dredgings were made under the direction of Count Pourtales by the U. S. Fish Commission steamer *Bibb* in the Straits of Florida. The mollusks obtained by the *Bibb* were sent to Washington, and thence, in due course of time, to William Stimpson in Chicago, to whose care they were intrusted for report and publication. Before Stimpson had entered upon this task the entire collection was destroyed in the great Chicago fire. While these shells were in Washington prior to their shipment to Chicago they were inspected by Dr. W. H. Dall, who was greatly interested and astonished to find among the lot a specimen of a *Haliotis*. No representative of this genus had ever before been reported from western Atlantic waters. The discovery, therefore, of a *Haliotis* from Florida was an event important enough to inspire a more than casual scrutiny of the specimen, and its main characters became impressed upon his mind.

Some 20 years later, when publishing a preliminary report upon the mollusks collected by the *Blake*, Doctor Dall described from his memory this lost *Haliotis*, naming it in honor of Count Pourtales. The locality given clearly indicates that the specimen was a resident of the rocky strip of bottom lying just off the Florida Reef and since referred to by Alexander Agassiz as the "Pourtales Plateau."

In 1889 Doctor Dall published a report upon the mollusca taken by the *Albatross* in a voyage made from Norfolk, Virginia, to California. In this report he refers with some hesitancy a *Haliotis* collected in the Galapagos to *H. pourtalesii* and adds a new description of the species based upon the new examples taken by the *Albatross*. These specimens are in the United States National Museum collection (Cat. No. 96392).

Two years ago, while dredging from the *Eolis* along the inner edge of the Pourtales Plateau off Key West in 90 fathoms, I had the ex-

treme good fortune to secure a *Haliotis*, although a small and somewhat immature specimen. Upon showing this to Doctor Dall, he at once pronounced it to be the true *Haliotis pourtalesii*, as the sight of the specimen itself refreshed his memory of the example taken so many years ago by Pourtales at about the same locality. A comparison with the Galapagos specimens above referred to immediately demonstrated the fact that the Atlantic and the Pacific "*pourtalesii*" were not the same, but, upon the contrary, very distinct species.

The importance of an east American representative of this essentially Pacific genus warrants a new description made from this unique specimen, now in the Museum collection (Cat. No. 271601). I give the following description and figure. The Galapagos Island species must receive a new designation. I take much pleasure in naming it in honor of Doctor Dall.

HALIOTIS (PADOLLUS) POURTALESII Dall.

Plates 45 and 46, upper figures.

1881. *Haliotis pourtalesii* DALL, Bull. Mus. Comp. Zool. Cambridge, vol. 9, No. 2, p. 79.
1889. *Haliotis pourtalesii* DALL, Bull. Mus. Comp. Zool. Cambridge, vol. 28, pp. 33 and 395.
1889. *Haliotis pourtalesii* DALL, Bull. U. S. Nat. Mus., No. 37, p. 168.
1903. *Haliotis pourtalesii* DALL, Bull. U. S. Nat. Mus., No. 37, p. 168. (Reprint.)
1911. *Haliotis pourtalesii* HENDERSON, Nautilus, vol. 25, No. 7, p. 81.
1914. *Haliotis pourtalesii* COOKE, Proc. Mal. Soc. London, vol. 11, pt. 2, p. 103.

Shell somewhat longer than wide. Holes 17, the last 5 open with prominent margins, the closed ones prominent and bulbous. Nucleus consisting of one full whorl, smooth. The characteristic sculpture begins with the postnuclear whorl in very fine spiral lines which develop gradually into sharply raised, irregularly waving, spiral threads with finer intercalated threads appearing and continuing to the edge of the aperture. At the end of the second whorl there are 10 of these threads between the suture and the line of holes; at the margin of the aperture, 23 to 27. Below the line of holes the threads are more widely spaced, the third one forming a decidedly angulated periphery. Base marked by four equal, equally spaced, spiral threads on the posterior half. Anterior half of the base smooth, excepting a slender spiral sulcus a little within the edge of the wide expanded aperture. The axial sculpture consists of rather regularly spaced lines of growth. Color wax yellow with deeper patches of orange; nacreous shining within.

Length, 11 mm.; width, 8 mm.

Dredged about 3 miles off Sand Key, Florida, in 90 fathoms, on sand patches among rocks, on the edge of the "Pourtales Plateau."

HALIOTIS (PADOLLUS) DALLI, new name.

Plates 45 and 46, lower figures.

1889. *Haliotis pourtalesii*? DALL, Proc. U. S. Nat. Mus., vol. 12, p. 355, pl. 12, figs. 1, 3.
 1890. *Haliotis pourtalesii* PILSBRY, Man. Conch., ser. 1, vol. 12, p. 121, pl. 22, figs. 27, 28.
 1893. *Haliotis pourtalesii*? STEARNS, Proc. U. S. Nat. Mus., No. 942, vol. 16, pp. 418, 448.

The following is Doctor Dall's description in full:

Shell small, of a pale brick-red color, with white dots on some of the spirals, rather elevated, with about $2\frac{1}{2}$ whorls; apex small, prominent; holes about 25, of which 5 remain open, the margins of these rather prominent; outside the row of holes the usual sulcus is strongly marked; about midway from the suture to the lines of holes is a raised rib, rather obscure but differing in different individuals and corresponding to an internal sulcus; between the central ridge and the suture there are no undulations or transverse ridges of consequence; sculpture of well marked, rather flattish, spiral, close-set threads, sometimes with a single finer intercalary thread, overlaid by smaller rather compressed transverse ridges, in harmony with the incremental lines; on top of the spirals the ridges bulge like the threads of worsted on canvas embroidery; spire situated well forward and with sub-vertical sides; interior pearly, the coil of the spire rather close and the margin of the pillar flattened. Longitude of shell, 23; latitude, 18; altitude, 11.5; nucleus behind the anterior end, 17 mm.

Hab.—Station 2815, in 33 fathoms, sand; near Charles Island, of the Galapagos group, in the Pacific.

The nearest relative of this shell is *H. parva*, from the Cape of Good Hope, which differs from our specimens chiefly in the greater prominence of the central rib, and in being a little more circular in outline.

The shell from the Galapagos agrees so exactly with what we know of *H. pourtalesii* and with my own recollection of the type specimen destroyed in the Chicago fire, that I am unwilling to separate it, though the distance between the two localities is so great.

The occurrence of this shell at the Galapagos is of great interest apart from its supposed connection with the Floridian species. No species of *Haliotis* is known from the west coast of South America, of Central America, or of North America south of northern Mexico. There are one or two small not nearly related species in the Melanesian Islands and north Australia. So the present species is remarkably isolated. Nothing of the sort has been previously reported from the Galapagos. Two specimens were obtained, neither containing the soft parts. The original type of *H. pourtalesii* contained the animal. It would probably be referred to the section *Padollus*.